

IN THE CLAIMS:

The status of each claim that has been introduced in the above-referenced application is identified in the ensuing listing of the claims. This listing of the claims replaces all previously submitted claims listings.

1. (Currently amended) A heat sink for assembly with a semiconductor device component, comprising:

a heat transfer element fabricated as a unitary structure, configured to be secured to the semiconductor device component, and including at least one passageway including an internally confined portion extending along a nonlinear path through the heat transfer element.

2. (Previously presented) The heat sink of claim 1, wherein at least a portion of the heat transfer element comprises a plurality of adjacent, mutually adhered regions comprising thermally conductive material.

3. (Previously presented) The heat sink of claim 2, wherein the thermally conductive material comprises a metal.

4. (Previously presented) The heat sink of claim 3, wherein the metal comprises copper, aluminum, tungsten, or titanium.

5. (Previously presented) The heat sink of claim 2, wherein the thermally conductive material comprises a ceramic or a glass.

6. (Previously presented) The heat sink of claim 1, wherein the heat transfer element comprises a plurality of particles that are secured to one another.

7. (Currently amended) The heat sink of claim 6, wherein adjacent ~~ones of the~~ particles are sintered together.

8. (Currently amended) The heat sink of claim 6, wherein adjacent ~~ones of the~~ particles are secured together with a binder.

9. (Currently amended) The heat sink of claim 216, wherein at least some of the plurality of superimposed, contiguous, mutually adhered layers comprise sheets of the thermally conductive material.

10. (Original) The heat sink of claim 9, wherein adjacent sheets are secured together with an adhesive material.

11. (Original) The heat sink of claim 9, wherein adjacent sheets are thermally bonded together.

12. (Currently amended) The heat sink of claim 1, wherein the at least one ~~nonlinear~~ passageway is configured to permit airflow therethrough.

13. (Previously presented) The heat sink of claim 1, further comprising a heat dissipation element adjacent to the heat transfer element and extending to a location remote from the semiconductor device component.

14. (Previously presented) The heat sink of claim 13, wherein at least a portion of the heat dissipation element comprises a plurality of adjacent, mutually adhered regions comprising thermally conductive material.

15. (Previously presented) The heat sink of claim 14, wherein the heat dissipation element includes a plurality of fins.

16. (Previously presented) The heat sink of claim 2, wherein the plurality of adjacent, mutually adhered regions comprises a plurality of superimposed, contiguous, mutually adhered layers.

17. (Previously presented) The heat sink of claim 14, wherein the plurality of adjacent, mutually adhered regions comprises a plurality of superimposed, contiguous, mutually adhered layers.